=> d l21 1-16 ibib abs hitstr hitind

L21 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:405429 HCAPLUS
DOCUMENT NUMBER: 142:435832
TITLE: Pharmaceutical formulations for carrier-mediated transport statins and uses thereof
INVENTOR(S): Butler, Jackie; **Devane, John**; Stark, Paul
PATENT ASSIGNEE(S): Athpharma Limited, Ire.
SOURCE: PCT Int. Appl., 80 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005041939	A1	20050512	WO 2004-IB3849	20041029
US 2005119331	A1	20050602	US 2004-967167	20041019

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.:		
US 2003-516770P	P	20031104
US 2004-967167	A	20041019

AB The present invention relates to formulations comprising therapeutically effective amts. of at least one acid-stable,

carrier-mediated transport statin, at least one poorly water-sol., carrier-mediated transport statin, or at least one large mol. wt., carrier-mediated transport statin, such as atorvastatin and rosuvastatin, or a pharmaceutically acceptable salt thereof, and methods of their use. The present formulations and methods are designed to exhibit a controlled-release of a therapeutic amt. of the statin in the small **intestine**, thereby limiting systemic exposure of the statin and maximizing liver-specific absorption of the drug. The formulations and methods of the present invention are particularly useful for treating and/or preventing conditions that are benefited by decreasing levels of lipids and/or cholesterol in the body. Modified-release compressed tablets contained atrovastatin 5.00, lactose 45.58, Avicell PH101 28.72, Methocel K100LV 20.00, colloidal silicon dioxide 0.20, and magnesium stearate 0.50%.

IC ICM A61K009-20
ICS A61K009-28; A61K031-40; A61K031-505; A61P003-06
CC 63-6 (Pharmaceuticals)
REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:259869 HCAPLUS
DOCUMENT NUMBER: 142:322767
TITLE: Treatment of gastroparesis and nonulcer dyspepsia with gabab agonists
INVENTOR(S): **Devane, John**; Butler, Jackie
PATENT ASSIGNEE(S): AGI Therapeutics Ltd., Ire.
SOURCE: PCT Int. Appl., 68 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005025559	A1	20050324	WO 2004-IB3299	200409 10

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ,

VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2005090554	A1	20050428	US 2004-935176	20040908
PRIORITY APPLN. INFO.:			US 2003-502242P	P 20030912
			US 2004-553940P	P 20040318

AB The present invention relates to formulations comprising a therapeutically effective amt. of baclofen or (R)-baclofen, or pharmaceutically acceptable salts thereof, and methods of their use. The present formulations and methods are designed to release a therapeutic amt. of baclofen in a manner that maximizes its therapeutic effect. The methods and formulations are esp. suitable for treating gastroparesis and nonulcer dyspepsia. A modified-release tablet contained (R)-baclofen 2.5, lactose 20.58, microcryst. cellulose 51.22, Methocel 20.00, colloidal silicon dioxide 0.20, magnesium stearate 0.50, and PVP 5.0%. Pharmacokinetics of the tablets were studied in healthy volunteers.

IC ICM A61K031-195
ICS A61K009-00

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

IT **Intestine**
(small; treatment of gastroparesis and nonulcer dyspepsia with gaba agonists)

IT Amyloidosis
Diabetes mellitus
Drug delivery systems
Gastric emptying
Gastrointestinal motility
Human
Hypothyroidism
Parkinson's disease
(treatment of gastroparesis and nonulcer dyspepsia with gaba agonists)

REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:216689 HCAPLUS
DOCUMENT NUMBER: 142:285208
TITLE: Controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease
INVENTOR(S): **Devane, John**; Butler, Jackie
PATENT ASSIGNEE(S): AGI Therapeutics Ltd., Ire.
SOURCE: PCT Int. Appl., 96 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005021009	A2	20050310	WO 2004-IB3059	20040902
WO 2005021009	A3	20050714		
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RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
US 2005090473	A1	20050428	US 2004-930743	20040901

PRIORITY APPLN. INFO.: US 2003-499365P P 20030903

AB Methods and formulations for treating inflammatory **bowel** disease are disclosed. The methods and formulations include, but are not limited to, methods and formulations for delivering effective concns. of 4-aminosalicylic acid and/or 5-aminosalicylic acid to affected areas of the **intestine.** The methods and formulations comprise modified-release elements, providing for drug

delivery to the affected or desired area. Diseases and conditions treatable with the present invention include Crohn's disease and **ulcerative colitis.** Thus a matrix tablet contained (mg/tab): 4-aminosalicylate sodium 571.76; lactose 78.12; Avicel PH101 78.12; Methocel Premium CR 200.00; silica 2.00; stearic acid 20.0; PVP 50.0. The pH-dependent coating included (wt./wt.%): Eudragit L100 6.39; Acetyl tri-Bu citrate 1.60; water 3.26; ethanol 88.75.

IC ICM A61K031-655
ICS A61K031-606; A61P001-06; C07C245-08; A61K009-20; A61K009-28; A61K009-50

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

ST aminosalicylate controlled release coated tablet inflammatory **bowel** disease

IT Inflammation
(Crohn's disease; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT **Intestine**, disease
(Crohn's; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Polymers, biological studies
(cellulosic, controlled-release, Methocel Premium CR; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Absorbents
Buffers
Coating materials
Coating process
Dissolution
Dyes
Fillers
Humectants
Lubricants
Pharmacokinetics
Plasticizers
Preservatives
Urine analysis
Wetting agents
pH
(controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Drug delivery systems
(controlled-release, modified-, delayed-, and extended-release; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT **Intestine**, disease

(inflammatory; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Acids, biological studies
(org.; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Membranes, nonbiological
(semipermeable, in drug formulation; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Drug delivery systems
(sustained-release; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Drug delivery systems
(tablet disintegrant; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Drug delivery systems
(tablets, coated; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT Inflammation
Intestine, disease
(**ulcerative colitis**; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT 242126-56-3
(controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT 95710-87-5
(controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT 7640-38-2
(controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT 57-11-4, Stearic acid, biological studies 63-42-3, Lactose 77-90-7, Acetyl tributyl citrate 109-43-3 557-04-0, Magnesium stearate 7631-86-9, Silica, biological studies 9003-39-8, PVP 9004-34-6, Avicel PH101, biological studies 9004-57-3, Ethocel 9063-38-1, Sodium starch glycolate 14807-96-6, Talc, biological studies 25086-15-1, Eudragit L100 25086-48-0 33434-24-1, Eudragit RS 12.5
(controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT 65-49-6, 4-Aminosalicylic acid
(controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT 89-57-6, 5-Aminosalicylic acid 89-57-6D, salts and esters
15722-48-2, 5,5'-Azo-bis salicylic acid 15722-48-2D, 5,5'-Azo-bis salicylic acid, salts of 95710-82-0 95710-82-0D, salts of
(controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

IT 7647-01-0, Hydrogen chloride, biological studies
(testing medium; controlled-release formulations of aminosalicylates for treating inflammatory **bowel** disease)

L21 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:780526 HCAPLUS
DOCUMENT NUMBER: 141:289059
TITLE: Treatment of **intestinal** conditions with N-2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine
INVENTOR(S): **Devane, John**
PATENT ASSIGNEE(S): Athpharma Limited, Ire.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004080446	A1	20040923	WO 2004-IB1134	200403 12
WO 2004080446	B1	20041209		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2518385	AA	20040923	CA 2004-2518385	200403 12
US 2004209961	A1	20041021	US 2004-798421	

200403
12

EP 1603544 A1 20051214 EP 2004-720110
200403
12

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK

PRIORITY APPLN. INFO.: US 2003-454527P P
200303
14

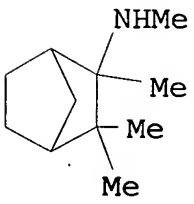
WO 2004-IB1134 W
200403
12

AB The invention discloses methods and formulations for reducing, preventing, and/or managing abnormal increases in **gastrointestinal** motility, and **intestinal** conditions that cause the same. Methods of using N-2,3,3-tetramethylbicyclo-[2.2.1]heptane-2-amine and formulations comprising N-2,3,3-tetramethylbicyclo-[2.2.1]heptan-2-amine are included.

IT **60-40-2**
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

RN 60-40-2 HCAPLUS

CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl- (9CI) (CA INDEX NAME)



IT **107538-05-6 107538-06-7 760175-93-7**
760175-94-8 760175-95-9 760175-96-0
760175-97-1 760175-98-2 760175-99-3
760176-00-9 760176-01-0 760176-02-1
760176-03-2 760176-04-3 760176-05-4
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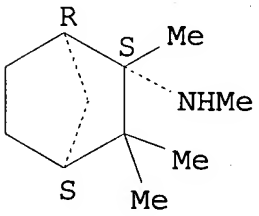
760176-37-2 760176-38-3 760176-39-4
760176-40-7 760176-41-8 760176-42-9
760176-43-0 760176-44-1 760176-45-2
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

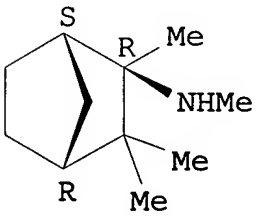
RN 107538-05-6 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, (1R,2S,4S)-(9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 107538-06-7 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, (1S,2R,4R)-(9CI) (CA INDEX NAME)

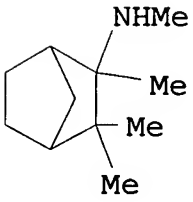
Absolute stereochemistry.



RN 760175-93-7 HCAPLUS
CN 1,6-Hexanediaminium, N,N,N,N',N',N'-hexamethyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 60-26-4
CMF C12 H30 N2

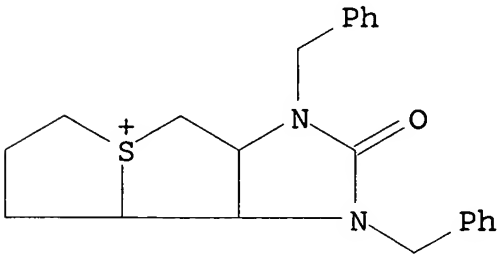
$Me_3{}^+N-(CH_2)_6-N^+Me_3$

RN 760175-94-8 HCAPLUS
CN Thieno[1',2':1,2]thieno[3,4-d]imidazol-5-ium, decahydro-2-oxo-1,3-bis(phenylmethyl)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 7187-66-8
CMF C22 H25 N2 O S

Currently available stereo shown.



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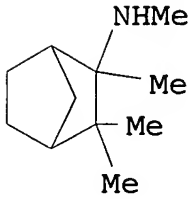
CRN 60-40-2

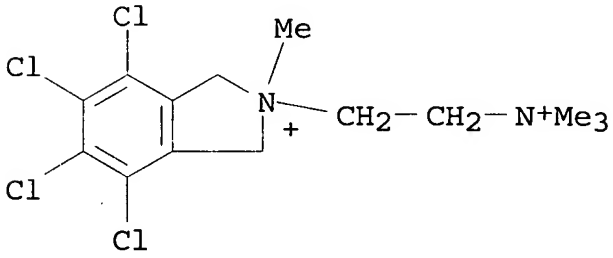
CMF C11 H21 N



RN 760175-95-9 HCAPLUS
CN 1H-Isoindolium, 4,5,6,7-tetrachloro-2,3-dihydro-2-methyl-2-[2-(trimethylammonio)ethyl]-, dichloride, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

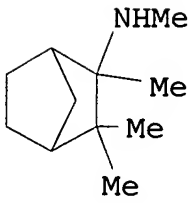
CRN 69-27-2
CMF C14 H20 Cl4 N2 . 2 Cl



●2 Cl⁻

CM 2

CRN 60-40-2
CMF C11 H21 N

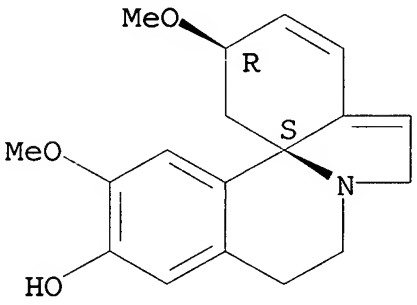


RN 760175-96-0 HCAPLUS
CN Erythrinan-16-ol, 1,2,6,7-tetradehydro-3,15-dimethoxy-, (3.beta.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 7290-03-1
CMF C18 H21 N O3

Absolute stereochemistry.



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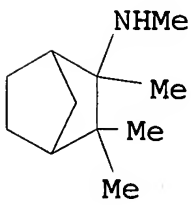


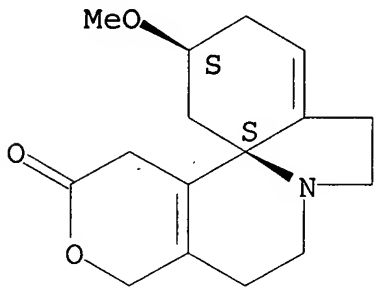
RN 760175-97-1 HCAPLUS

CN 1H,12H-Benzo[i]pyrano[3,4-g]indolizin-12-one, 2,3,5,6,8,9,10,13-octahydro-2-methoxy-, (2S,13bS)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 23255-54-1
CMF C16 H21 N O3

Absolute stereochemistry.



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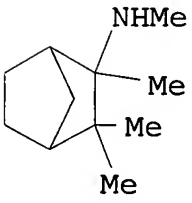
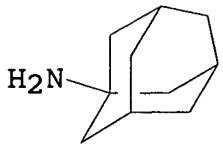
CMF C11 H21 N



RN 760175-98-2 HCAPLUS
CN Tricyclo[3.3.1.13,7]decan-1-amine, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

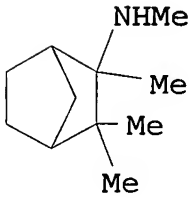
CM 1

CRN 768-94-5
CMF C10 H17 N



CM 2

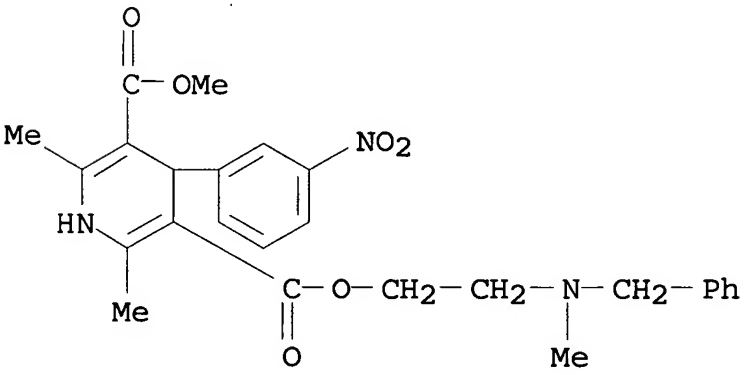
CRN 60-40-2
CMF C11 H21 N



RN 760175-99-3 HCAPLUS
CN 3,5-Pyridinedicarboxylic acid, 1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-, methyl 2-[methyl(phenylmethyl)amino]ethyl ester, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

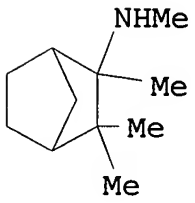
CM 1

CRN 55985-32-5
CMF C26 H29 N3 O6



CM 2

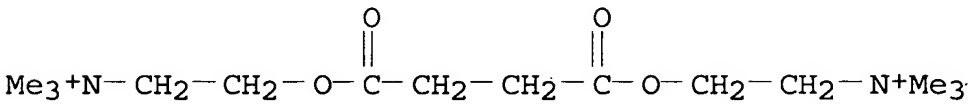
CRN 60-40-2
CMF C11 H21 N



RN 760176-00-9 HCAPLUS
CN Ethanaminium, 2,2'-[(1,4-dioxo-1,4-butanediyl)bis(oxy)]bis[N,N,N-trimethyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

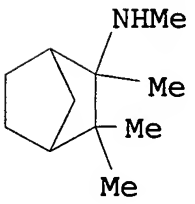
CM 1

CRN 306-40-1
CMF C14 H30 N2 O4



CM 2

CRN 60-40-2
CMF C11 H21 N



RN 760176-01-0 HCAPLUS
CN 1,10-Decanediaminium, N,N,N,N',N',N'-hexamethyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX

NAME)

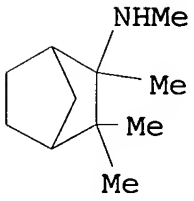
CM 1

CRN 156-74-1
CMF C16 H38 N2

$Me_3{}^+N-(CH_2)_{10}-N^+Me_3$

CM 2

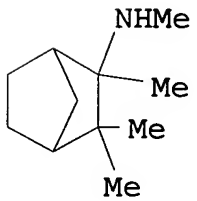
CRN 60-40-2
CMF C11 H21 N



RN 760176-02-1 HCAPLUS
CN 13H-4,6:21,24-Dietheno-8,12-metheno-1H-pyrido[3',2':14,15][1,11]dioxacycloeicosino[2,3,4-ij]isoquinolinium, 2,3,13a,14,15,16,25,25a-octahydro-9,19-dihydroxy-18,29-dimethoxy-1,14,14-trimethyl-, (13aR,25aS)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

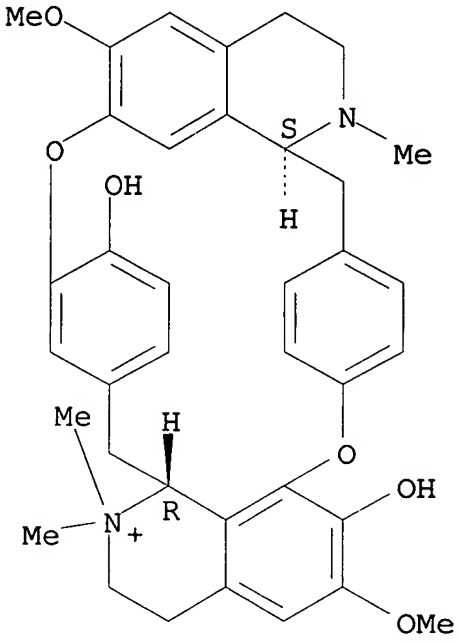
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 57-95-4
CMF C37 H41 N2 O6

Absolute stereochemistry.

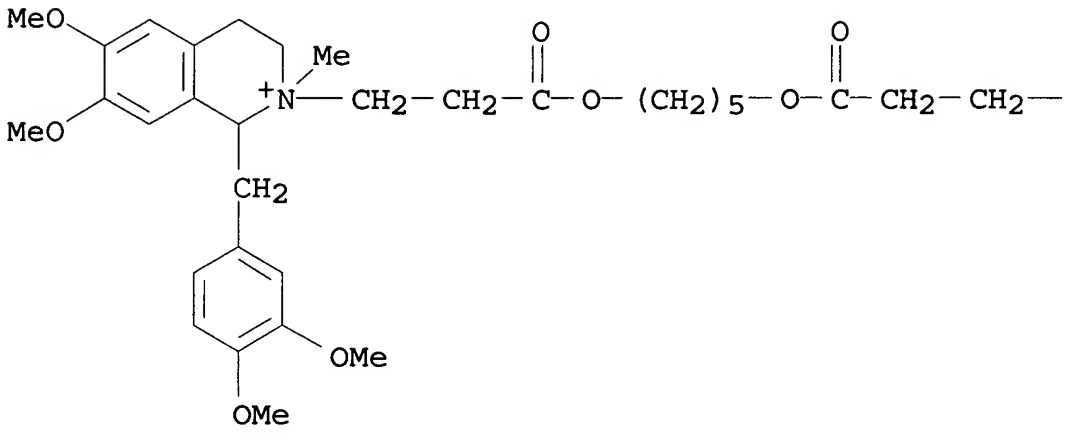


RN 760176-03-2 HCAPLUS
CN Isoquinolinium, 2,2'-[1,5-pentanediylbis[oxy(3-oxo-3,1-propanediyl)]]bis[1-[(3,4-dimethoxyphenyl)methyl]-1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

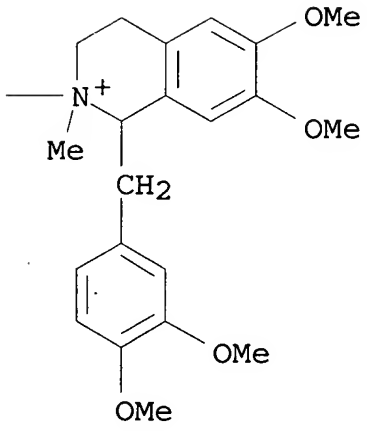
CM 1

CRN 64228-79-1
CMF C53 H72 N2 O12

PAGE 1-A

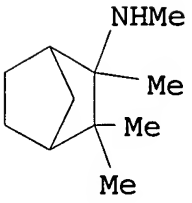


PAGE 1-B



CM 2

CRN 60-40-2
CMF C11 H21 N



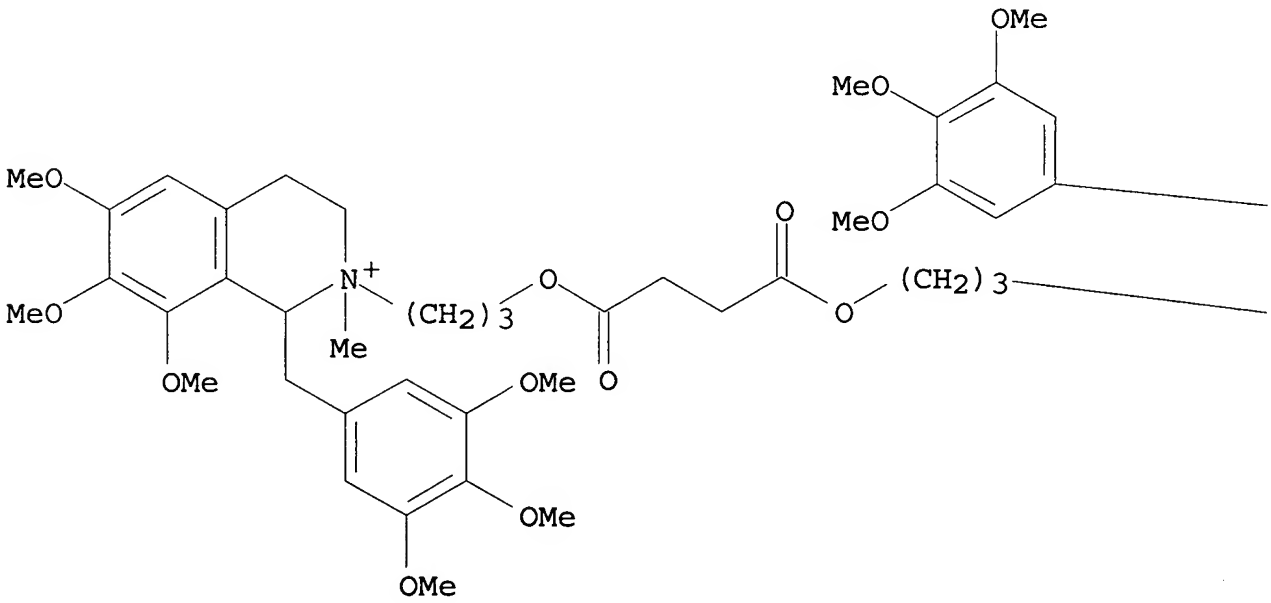
RN 760176-04-3 HCAPLUS
CN Isoquinolinium, 2,2'-[(1,4-dioxo-1,4-butanediyl)bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7,8-trimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, (1R,1'R,2S,2'S)-rel-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

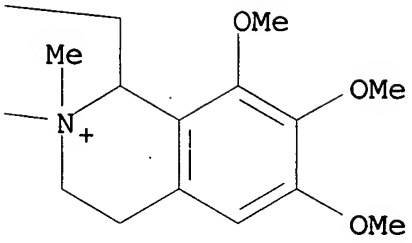
CRN 133814-18-3
CMF C56 H78 N2 O16

Currently available stereo shown.

PAGE 1-A

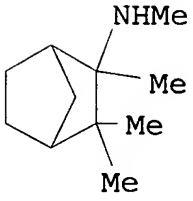


PAGE 1-B



CM 2

CRN 60-40-2
CMF C11 H21 N



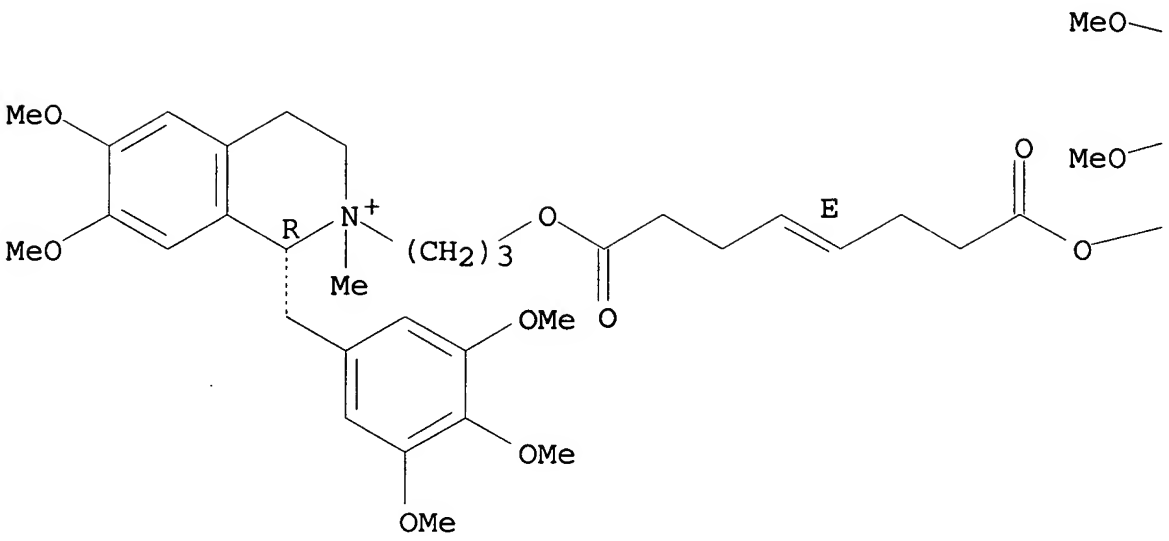
RN 760176-05-4 HCAPLUS
CN Isoquinolinium, 2,2'-[[(4E)-1,8-dioxo-4-octene-1,8-diyl]bis(oxy-3,1-propanediyl)]bis[1,2,3,4-tetrahydro-6,7-dimethoxy-2-methyl-1-[(3,4,5-trimethoxyphenyl)methyl]-, (1R,1'R)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

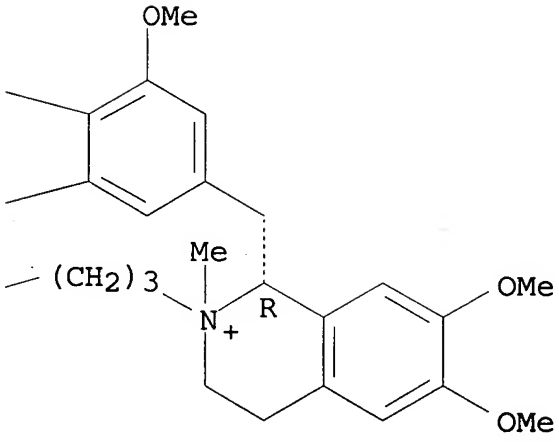
CRN 133814-19-4
CMF C58 H80 N2 O14

Absolute stereochemistry.
Double bond geometry as shown.

PAGE 1-A

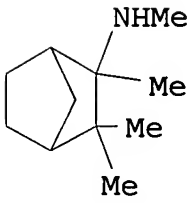


PAGE 1-B



CM 2

CRN 60-40-2
CMF C11 H21 N

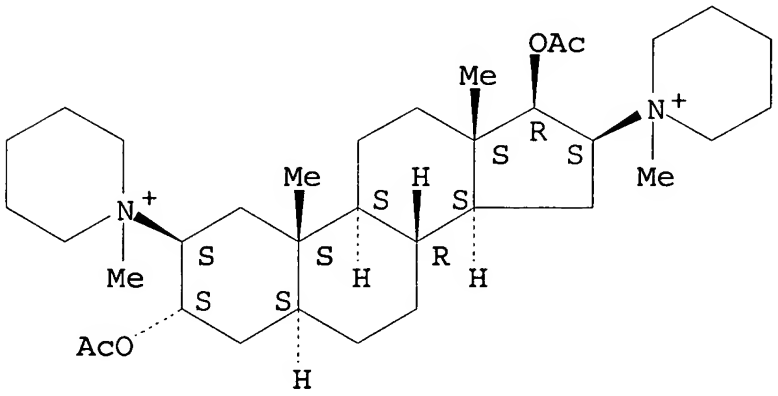


RN 760176-06-5 HCAPLUS
CN Piperidinium, 1,1'-[(2.beta.,3.alpha.,5.alpha.,16.beta.,17.beta.)-3,17-bis(acetyloxy)androstane-2,16-diyl]bis[1-methyl-, dibromide, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 15500-66-0
CMF C35 H60 N2 O4 . 2 Br

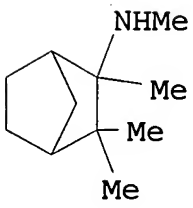
Absolute stereochemistry.



●2 Br⁻

CM 2

CRN 60-40-2
CMF C11 H21 N

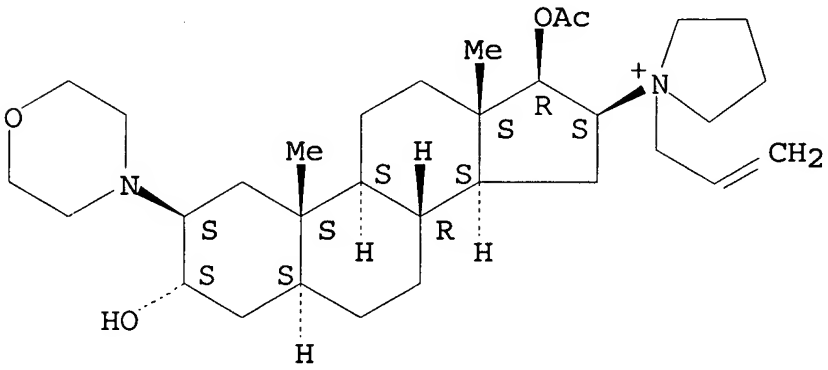


RN 760176-07-6 HCAPLUS
CN Pyrrolidinium, 1-[(2.beta.,3.alpha.,5.alpha.,16.beta.,17.beta.)-17-(acetyloxy)-3-hydroxy-2-(4-morpholinyl)androstan-16-yl]-1-(2-propenyl)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

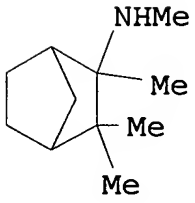
CRN 143558-00-3
CMF C32 H53 N2 O4

Absolute stereochemistry.



CM 2

CRN 60-40-2
CMF C11 H21 N

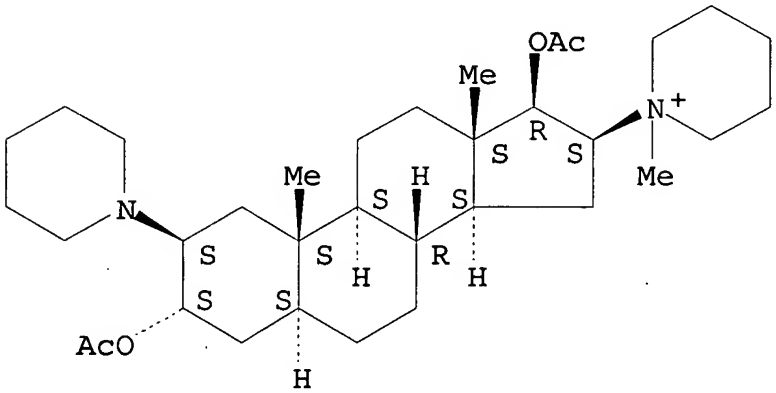


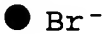
RN 760176-08-7 HCAPLUS
CN Piperidinium, 1-[(2.beta.,3.alpha.,5.alpha.,16.beta.,17.beta.)-3,17-bis(acetyloxy)-2-(1-piperidinyl)androstan-16-yl]-1-methyl-, bromide, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 50700-72-6
CMF C34 H57 N2 O4 . Br

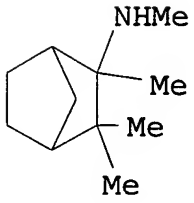
Absolute stereochemistry.





CM 2

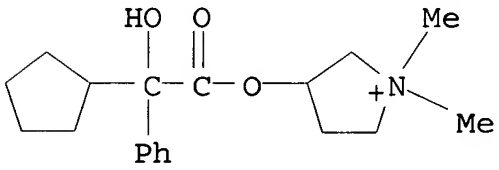
CRN 60-40-2
CMF C11 H21 N

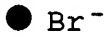


RN 760176-09-8 HCAPLUS
CN Pyrrolidinium, 3-[(cyclopentylhydroxyphenylacetyl)oxy]-1,1-dimethyl-; bromide, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

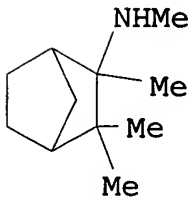
CRN 596-51-0
CMF C19 H28 N O3 . Br





CM 2

CRN 60-40-2
CMF C11 H21 N

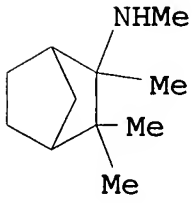


RN 760176-10-1 HCAPLUS
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)- (3-endo)-8-methyl-8-

azabicyclo[3.2.1]oct-3-yl ester, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

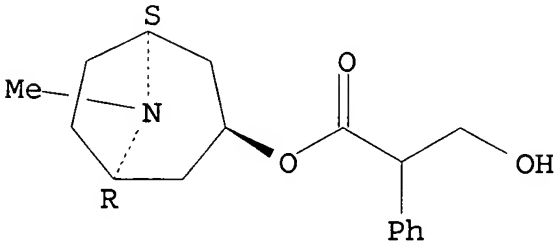
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 51-55-8
CMF C17 H23 N O3

Relative stereochemistry.

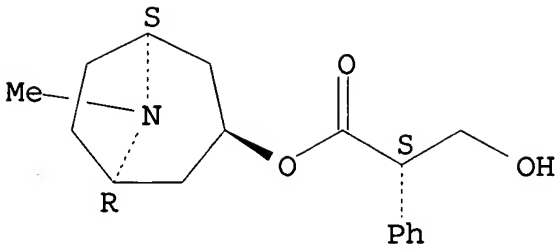


RN 760176-11-2 HCAPLUS
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)-, (3-endo)-8-methyl-8-azabicyclo[3.2.1]oct-3-yl ester, (.alpha.S)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

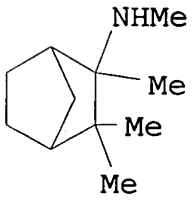
CRN 101-31-5
CMF C17 H23 N O3

Absolute stereochemistry. Rotation (-).



CM 2

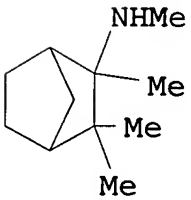
CRN 60-40-2
CMF C11 H21 N



RN 760176-12-3 HCAPLUS
CN Benzeneacetic acid, .alpha.-(hydroxymethyl)-, (1.alpha.,2.beta.,4.beta.,5.alpha.,7.beta.)-9-methyl-3-oxa-9-azatricyclo[3.3.1.02,4]non-7-yl ester, (.alpha.S)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

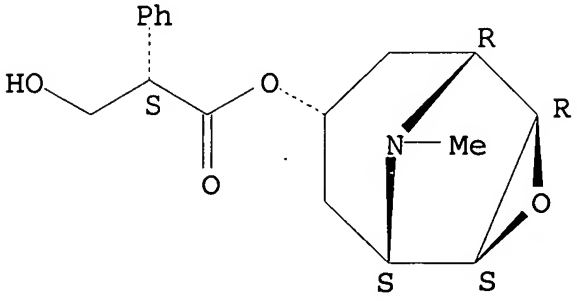
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 51-34-3
CMF C17 H21 N O4

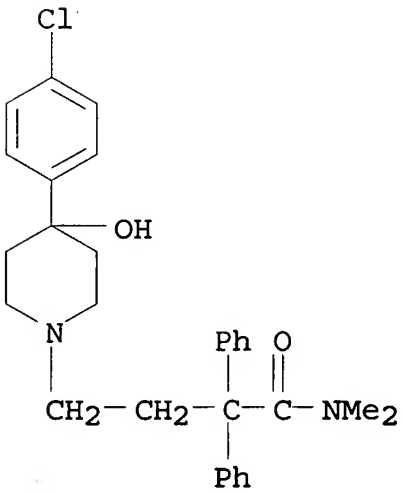
Absolute stereochemistry. Rotation (-).



RN 760176-13-4 HCAPLUS
CN 1-Piperidinebutanamide, 4-(4-chlorophenyl)-4-hydroxy-N,N-dimethyl-.alpha.,.alpha.-diphenyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

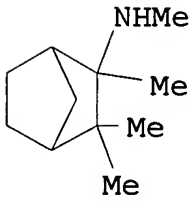
CRN 53179-11-6
CMF C29 H33 Cl N2 O2



CM 2

CRN 60-40-2

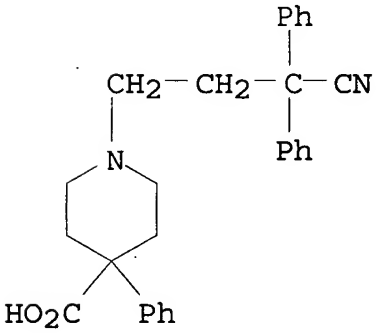
CMF C11 H21 N



RN 760176-14-5 HCAPLUS
CN 4-Piperidinecarboxylic acid, 1-(3-cyano-3,3-diphenylpropyl)-4-phenyl-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

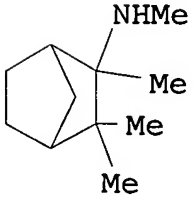
CM 1

CRN 28782-42-5
CMF C28 H28 N2 O2



CM 2

CRN 60-40-2
CMF C11 H21 N

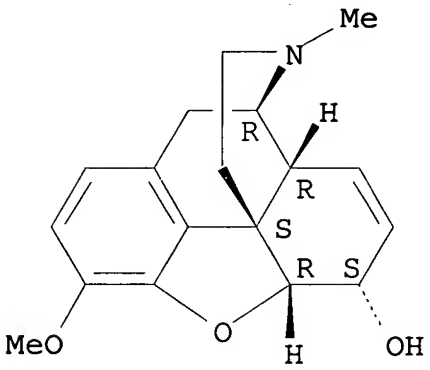


RN 760176-15-6 HCAPLUS
CN Morphinan-6-ol, 7,8-didehydro-4,5-epoxy-3-methoxy-17-methyl-, (5.alpha.,6.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

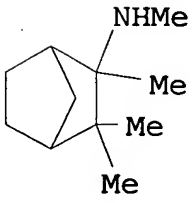
CRN 76-57-3
CMF C18 H21 N O3

Absolute stereochemistry.



CM 2

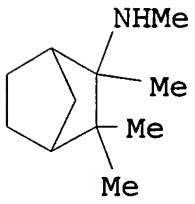
CRN 60-40-2
CMF C11 H21 N



RN 760176-16-7 HCAPLUS
CN Morphinan-3,6-diol, 7,8-didehydro-4,5-epoxy-17-methyl-(5.alpha.,6.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

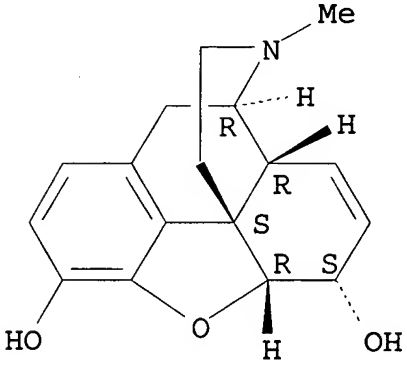
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 57-27-2
CMF C17 H19 N O3

Absolute stereochemistry. Rotation (-).

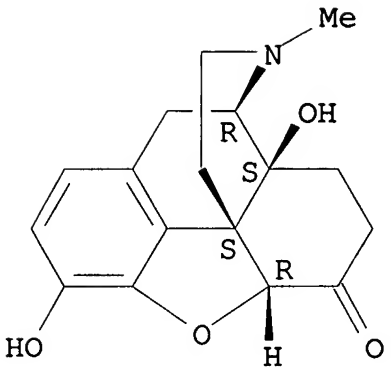


RN 760176-17-8 HCAPLUS
CN Morphinan-6-one, 4,5-epoxy-3,14-dihydroxy-17-methyl-, (5.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

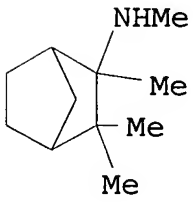
CRN 76-41-5
CMF C17 H19 N O4

Absolute stereochemistry.



CM 2

CRN 60-40-2
CMF C11 H21 N

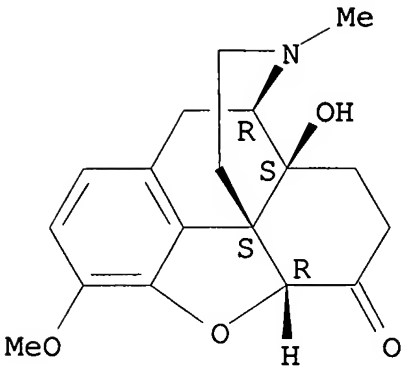


RN 760176-18-9 HCAPLUS
CN Morphinan-6-one, 4,5-epoxy-14-hydroxy-3-methoxy-17-methyl-, hydrochloride, (5.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 124-90-3
CMF C18 H21 N O4 . Cl H

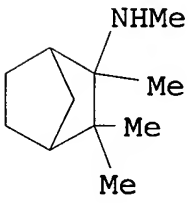
Absolute stereochemistry.



● HCl

CM 2

CRN 60-40-2
CMF C11 H21 N

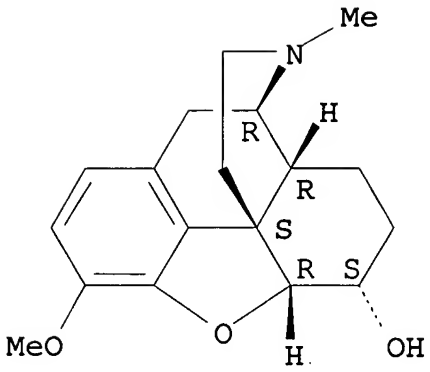


RN 760176-19-0 HCAPLUS
CN Morphinan-6-ol, 4,5-epoxy-3-methoxy-17-methyl-, (5.alpha.,6.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

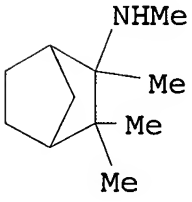
CRN 125-28-0
CMF C18 H23 N O3

Absolute stereochemistry.



CM 2

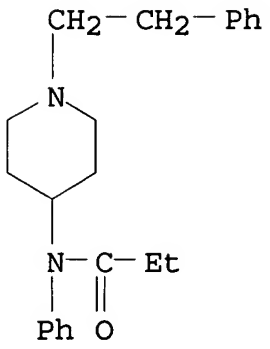
CRN 60-40-2
CMF C11 H21 N



RN 760176-20-3 HCAPLUS
CN Propanamide, N-phenyl-N-[1-(2-phenylethyl)-4-piperidinyl]-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

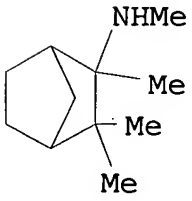
CM 1

CRN 437-38-7
CMF C22 H28 N2 O



CM 2

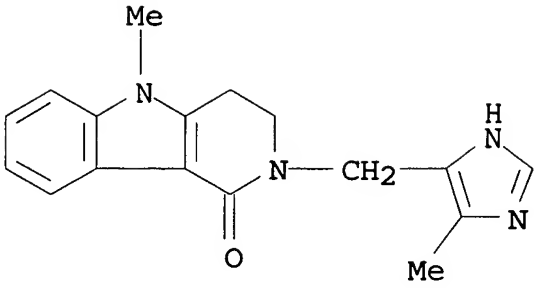
CRN 60-40-2
CMF C11 H21 N



RN 760176-21-4 HCAPLUS
CN 1H-Pyrido[4,3-b]indol-1-one, 2,3,4,5-tetrahydro-5-methyl-2-[(5-methyl-1H-imidazol-4-yl)methyl]-, monohydrochloride, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

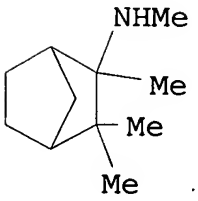
CRN 122852-69-1
CMF C17 H18 N4 O . Cl H



● HCl

CM 2

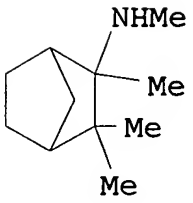
CRN 60-40-2
CMF C11 H21 N



RN 760176-22-5 HCAPLUS
CN Benzeneacetonitrile, .alpha.-[3-[[2-(3,4-dimethoxyphenyl)ethyl]methylamino]propyl]-3,4-dimethoxy-.alpha.-(1-methylethyl)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

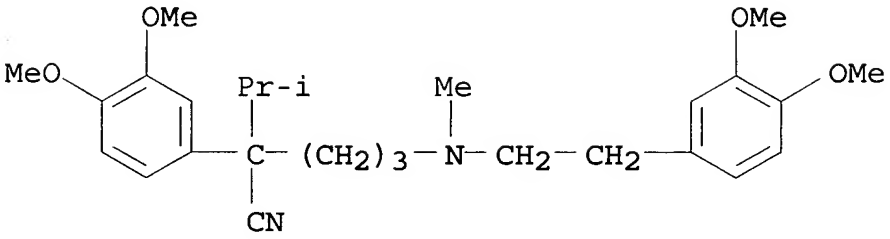
CM 1

CRN 60-40-2
CMF C11 H21 N



CM 2

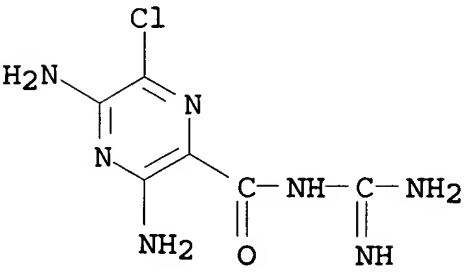
CRN 52-53-9
CMF C27 H38 N2 O4



RN 760176-23-6 HCAPLUS
CN Pyrazinecarboxamide, 3,5-diamino-N-(aminoiminomethyl)-6-chloro-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

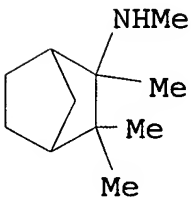
CM 1

CRN 2609-46-3
CMF C6 H8 Cl N7 O



CM 2

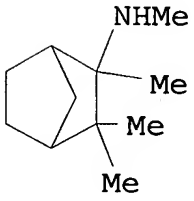
CRN 60-40-2
CMF C11 H21 N



RN 760176-24-7 HCAPLUS
CN Benzoic acid, 5-(aminosulfonyl)-4-chloro-2-[(2-furanylmethyl)amino]-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

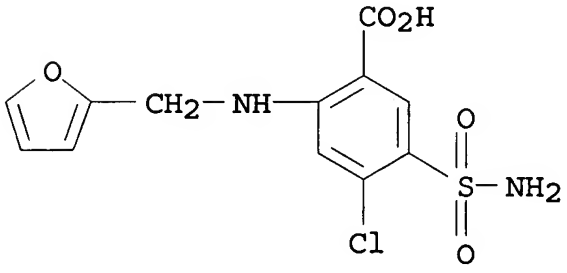
CM 1

CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 54-31-9
CMF C12 H11 Cl N2 O5 S



RN 760176-25-8 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, mixt. with bismuth (9CI) (CA INDEX NAME)

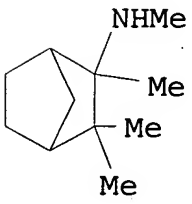
CM 1

CRN 7440-69-9
CMF Bi

Bi

CM 2

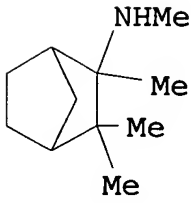
CRN 60-40-2
CMF C11 H21 N



RN 760176-27-0 HCAPLUS
CN L-Cysteinamide, D-phenylalanyl-L-cysteinyl-L-phenylalanyl-D-tryptophyl-L-lysyl-L-threonyl-N-[(1R,2R)-2-hydroxy-1-(hydroxymethyl)propyl]-, cyclic (2.fwdarw.7)-disulfide, monoacetate (salt), mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

CRN 60-40-2
CMF C11 H21 N

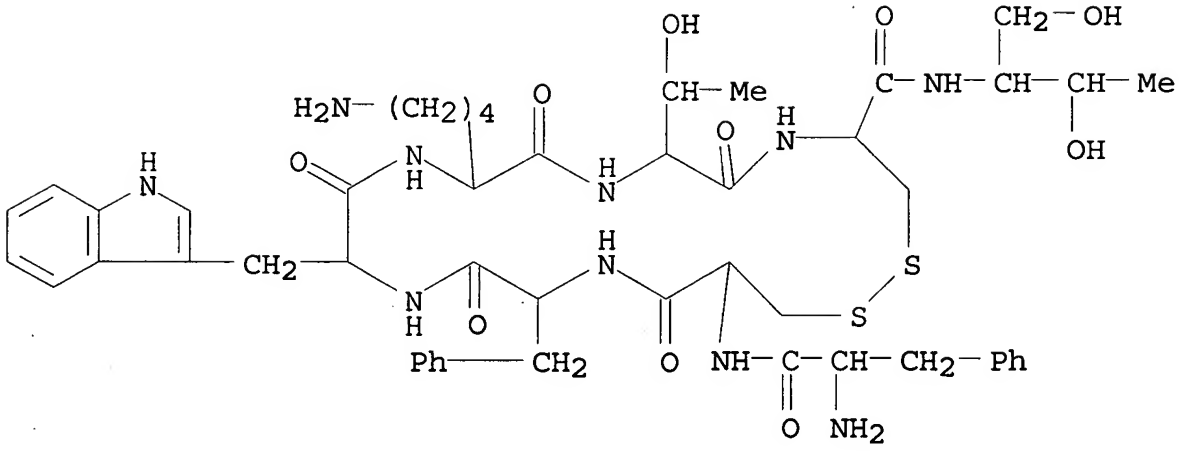


CM 2

CRN 760176-26-9
CMF C49 H66 N10 O10 S2 . C2 H4 O2

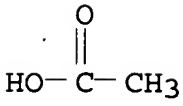
CM 3

CRN 83150-76-9
CMF C49 H66 N10 O10 S2



CM 4

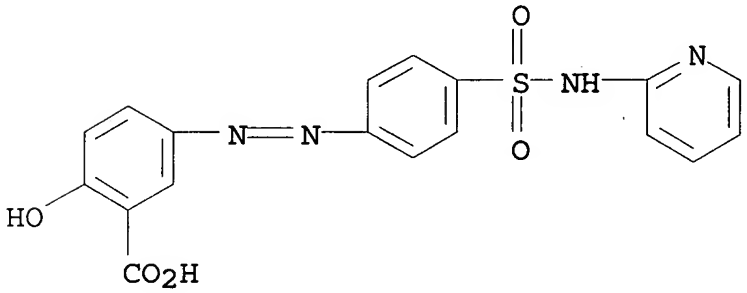
CRN 64-19-7
CMF C2 H4 O2



RN 760176-28-1 HCAPLUS
CN Benzoic acid, 2-hydroxy-5-[[4-[(2-pyridinylamino)sulfonyl]phenyl]azo]-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

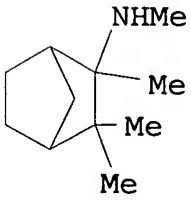
CM 1

CRN 599-79-1
CMF C18 H14 N4 O5 S



CM 2

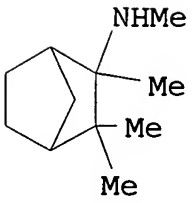
CRN 60-40-2
CMF C11 H21 N



RN 760176-29-2 HCAPLUS
CN Pregna-1,4-diene-3,11,20-trione, 17,21-dihydroxy-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

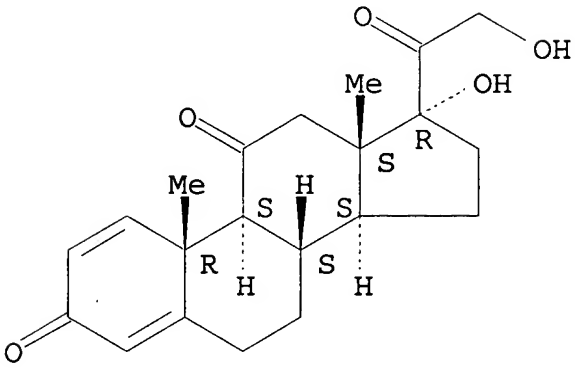
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 53-03-2
CMF C21 H26 O5

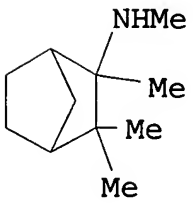
Absolute stereochemistry.



RN 760176-30-5 HCAPLUS
CN Pregna-1,4-diene-3,20-dione, 11,17,21-trihydroxy-, (11.beta.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

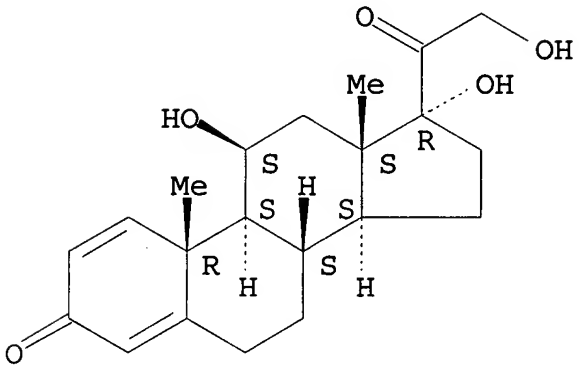
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 50-24-8
CMF C21 H28 O5

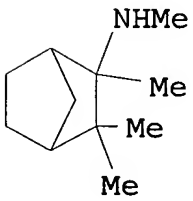
Absolute stereochemistry.



RN 760176-31-6 HCAPLUS
CN Pregn-4-ene-3,20-dione, 11,17,21-trihydroxy-, (11.beta.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

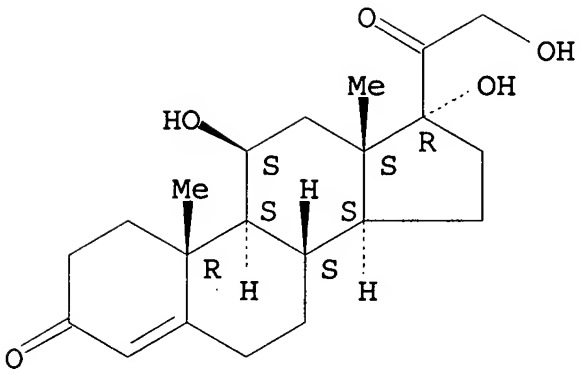
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 50-23-7
CMF C21 H30 O5

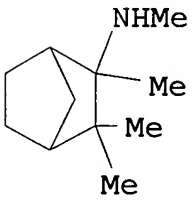
Absolute stereochemistry.



RN 760176-32-7 HCAPLUS
CN Pregn-4-ene-3,11,20-trione, 17,21-dihydroxy-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

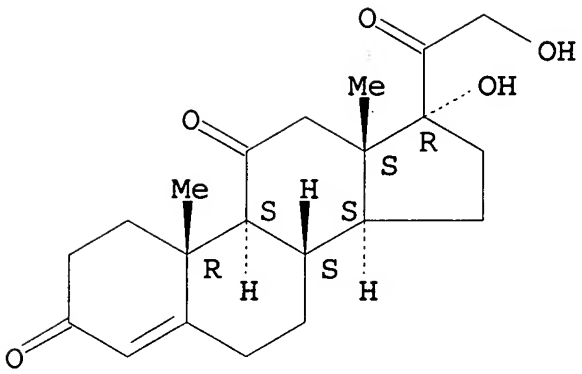
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 53-06-5
CMF C21 H28 O5

Absolute stereochemistry.

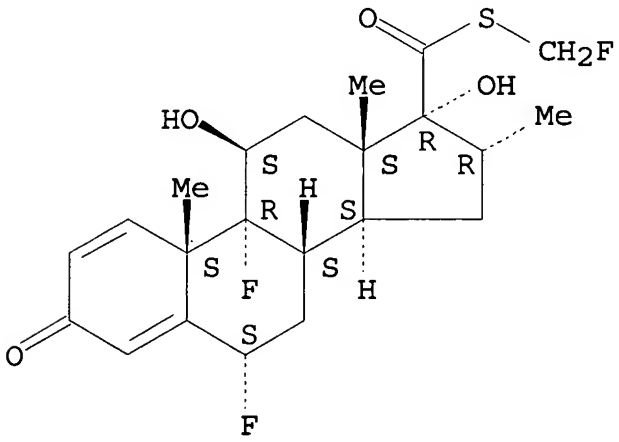


RN 760176-33-8 HCAPLUS
CN Androsta-1,4-diene-17-carbothioic acid, 6,9-difluoro-11,17-dihydroxy-16-methyl-3-oxo-, S-(fluoromethyl) ester, (6.alpha.,11.beta.,16.alpha.,17.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

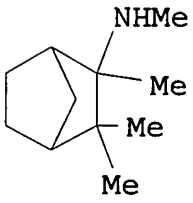
CRN 90566-53-3
CMF C22 H27 F3 O4 S

Absolute stereochemistry.



CM 2

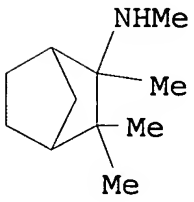
CRN 60-40-2
CMF C11 H21 N



RN 760176-34-9 HCAPLUS
CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, (11.beta.,16.alpha.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

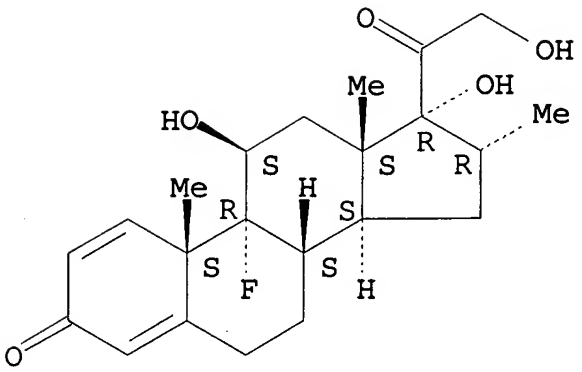
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 50-02-2
CMF C22 H29 F O5

Absolute stereochemistry.

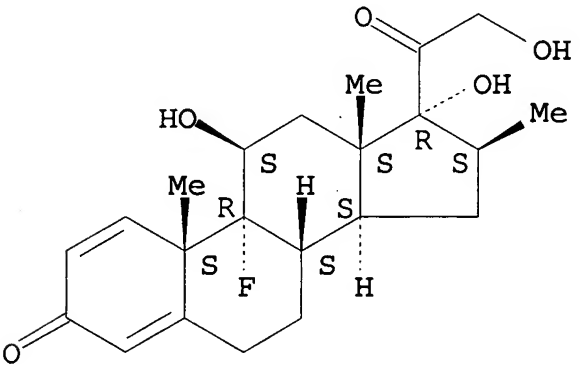


RN 760176-35-0 HCAPLUS
CN Pregna-1,4-diene-3,20-dione, 9-fluoro-11,17,21-trihydroxy-16-methyl-, (11.beta.,16.beta.)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

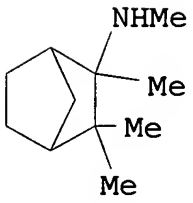
CRN 378-44-9
CMF C22 H29 F O5

Absolute stereochemistry.



CM 2

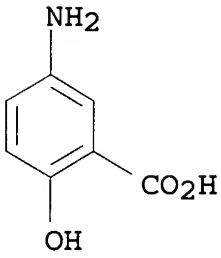
CRN 60-40-2
CMF C11 H21 N



RN 760176-36-1 HCAPLUS
CN Benzoic acid, 5-amino-2-hydroxy-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

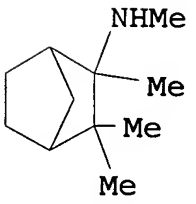
CM 1

CRN 89-57-6
CMF C7 H7 N O3



CM 2

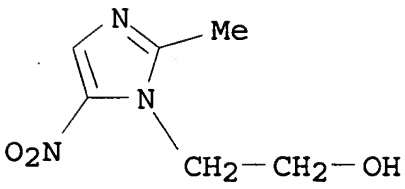
CRN 60-40-2
CMF C11 H21 N



RN 760176-37-2 HCAPLUS
CN 1H-Imidazole-1-ethanol, 2-methyl-5-nitro-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

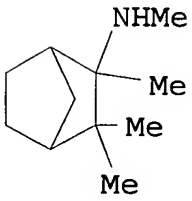
CM 1

CRN 443-48-1
CMF C6 H9 N3 O3



CM 2

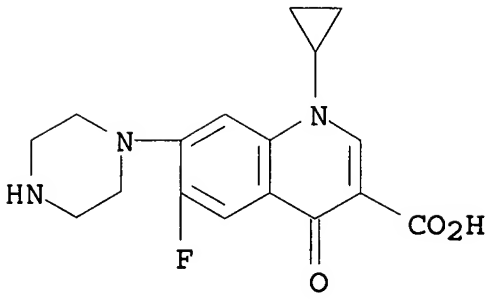
CRN 60-40-2
CMF C11 H21 N



RN 760176-38-3 HCAPLUS
CN 3-Quinolinecarboxylic acid, 1-cyclopropyl-6-fluoro-1,4-dihydro-4-oxo-7-(1-piperazinyl)-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

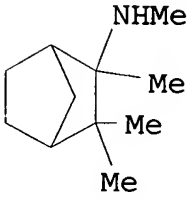
CM 1

CRN 85721-33-1
CMF C17 H18 F N3 O3



CM 2

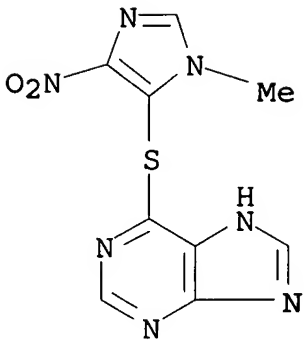
CRN 60-40-2
CMF C11 H21 N



RN 760176-39-4 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, mixt. with 6-[(1-methyl-4-nitro-1H-imidazol-5-yl)thio]-1H-purine (9CI) (CA INDEX NAME)

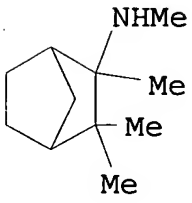
CM 1

CRN 446-86-6
CMF C9 H7 N7 O2 S



CM 2

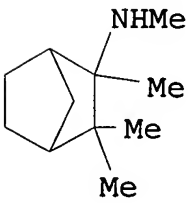
CRN 60-40-2
CMF C11 H21 N



RN 760176-40-7 HCAPLUS
CN 6H-Purine-6-thione, 1,7-dihydro-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

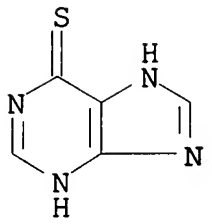
CM 1

CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 50-44-2
CMF C5 H4 N4 S



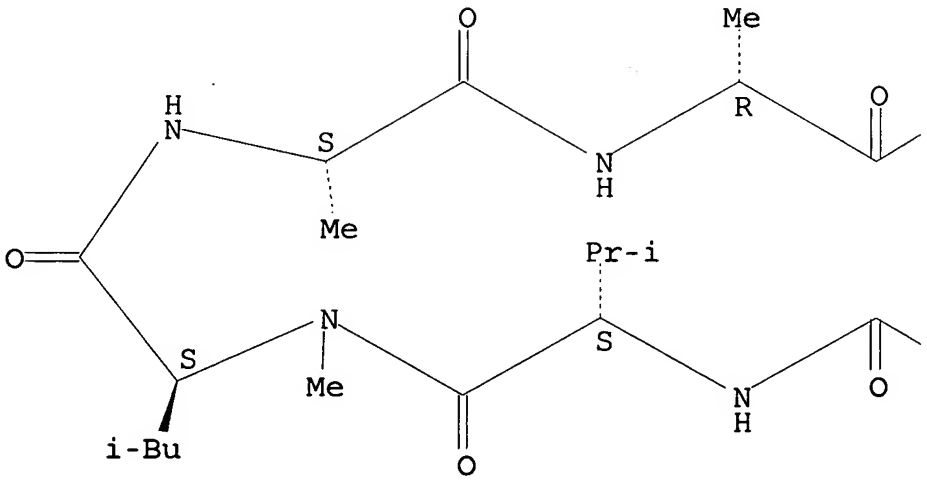
RN 760176-41-8 HCAPLUS
CN Cyclosporin A, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

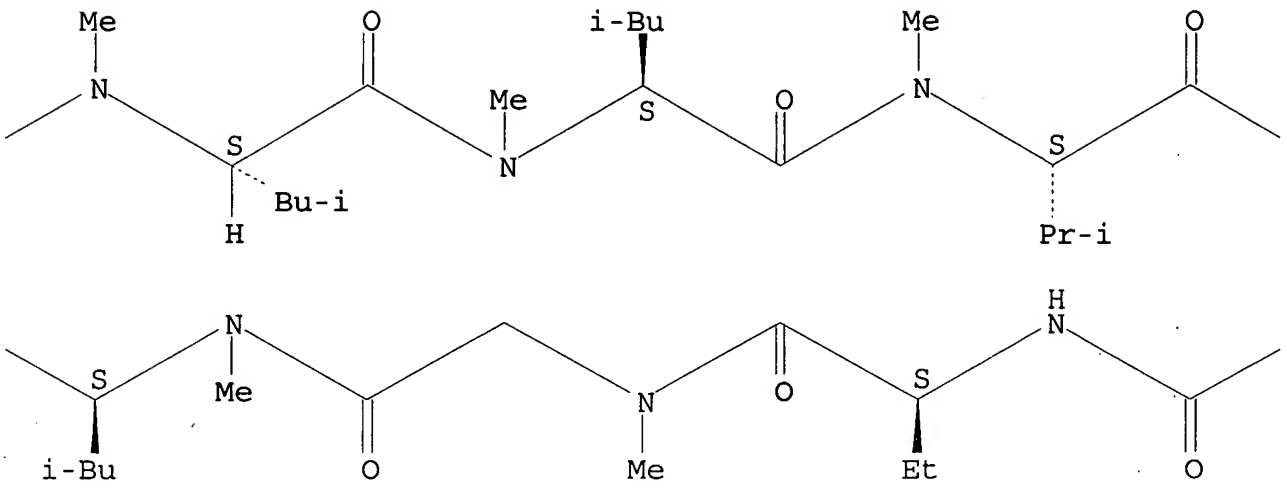
CRN 59865-13-3
CMF C62 H111 N11 O12

Absolute stereochemistry.
Double bond geometry as shown.

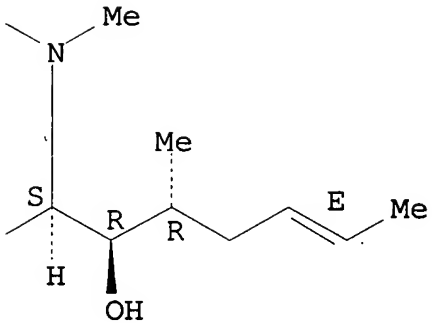
PAGE 1-A



PAGE 1-B

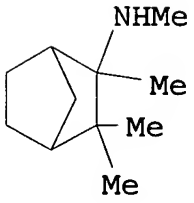


PAGE 1-C



CM 2

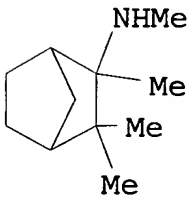
CRN 60-40-2
CMF C11 H21 N



RN 760176-42-9 HCAPLUS
CN L-Glutamic acid, N-[4-[[(2,4-diamino-6-pteridinyl)methyl]methylamino]benzoyl]-, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

CM 1

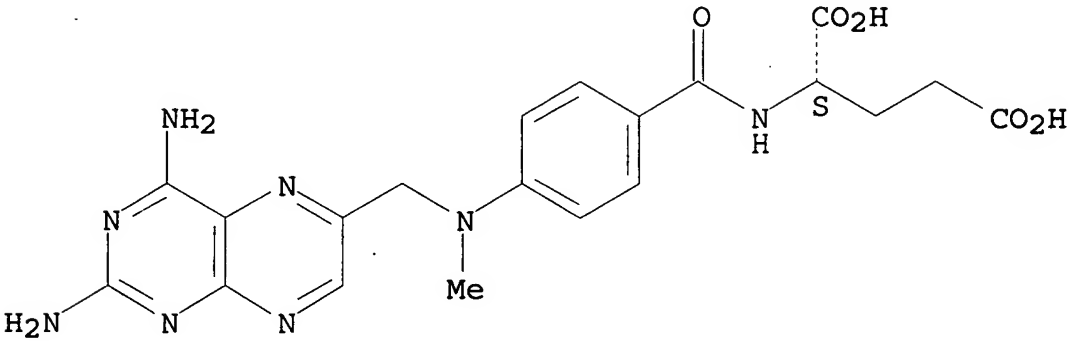
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 59-05-2
CMF C20 H22 N8 O5

Absolute stereochemistry.



RN 760176-43-0 HCAPLUS
CN Immunoglobulin G, anti-(human tumor necrosis factor), disulfide with human-mouse monoclonal cA2 light chain, dimer, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

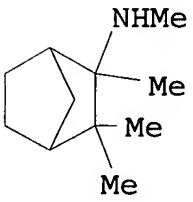
CM 1

CRN 170277-31-3
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 60-40-2
CMF C11 H21 N



RN 760176-44-1 HCAPLUS
CN Heparin, mixt. with N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine (9CI) (CA INDEX NAME)

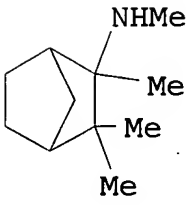
CM 1

CRN 9005-49-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

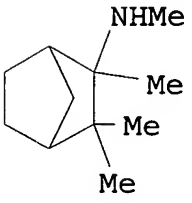
CRN 60-40-2
CMF C11 H21 N



RN 760176-45-2 HCAPLUS
CN Bicyclo[2.2.1]heptan-2-amine, N,2,3,3-tetramethyl-, mixt. with 3-[(2S)-1-methyl-2-pyrrolidinyl]pyridine (9CI) (CA INDEX NAME)

CM 1

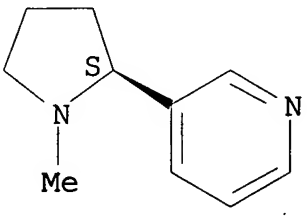
CRN 60-40-2
CMF C11 H21 N



CM 2

CRN 54-11-5
CMF C10 H14 N2

Absolute stereochemistry. Rotation (-).



IC ICM A61K031-135
ICS A61P001-12
CC 1-9 (Pharmacology)
Section cross-reference(s): 63
ST tetramethylbicycloheptanamine **gastrointestinal** motility

intestinal condition

IT Inflammation
(Crohn's disease, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(Crohn's, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Antihistamines
(H2; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Gastrointestinal** motility
(agents altering; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(buccal; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Inflammation
Intestine, disease
(**colitis**, **spastic**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(**colon**, neurogenic **colon**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(delayed release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Biological transport
(digestive tract fluid transport, agents altering; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Gastrointestinal** motility
(disorder, dysmotility; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating

intestinal conditions, and combinations with other agents)

IT Inflammation
Intestine, disease
(**diverticulitis**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Inflammation
Intestine, disease
(**enterocolitis**, acute, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(extended-release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Fats and Glyceridic oils, biological studies
(fish; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Digestive tract
(fluid transport, agents altering; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Bladder
(function; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(functional **bowel** disorder, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Nervous system agents
(ganglionic blocking agents; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(immediate-release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease

(inflammatory, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(irritable **bowel** syndrome, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**
(large, infection, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Dysentery**
(mild, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(modified-release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(multiparticulate; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(nasal; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(neurogenic, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(oral; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Transport proteins
(proton pump, inhibitors; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Stomach
(pylorus, **pyloric** spasm, **gastrointestinal**

motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **Intestine**, disease
(small, infection, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Muscle, disease
(spasm, **abdominal**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Muscle relaxants
(spasmolytics; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Digestive tract, **disease**
(**splenic flexure syndrome**, **gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(sublingual; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(tablets, modified-release; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT 5-HT agonists
5-HT antagonists
Antacids
Anti-infective agents
Anti-inflammatory agents
Antidiarrheals
Blood pressure
Calcium channel blockers
Combination chemotherapy
Diarrhea
Diuretics
Drug delivery systems
Drug toxicity
Gastrointestinal agents
Heart rate

Human
Immunomodulators
Muscarinic antagonists
Nicotinic antagonists
Vision
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Corticosteroids, biological studies
Estrogens
Mineralocorticoids
Opioids
Steroids, biological studies
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Drug delivery systems
(transdermal; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Inflammation
Intestine, disease
(**ulcerative colitis, gastrointestinal** motility increase from; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT Adrenoceptor antagonists
(.beta.-; tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT **60-40-2**
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

IT 50-02-2, Dexamethasone 50-23-7, Cortisol 50-24-8, Prednisolone 50-44-2, 6-Mercaptopurine 51-34-3, Scopolamine 51-55-8, Atropine, biological studies 52-53-9, Verapamil 53-03-2, Prednisone 53-06-5, Cortisone 54-11-5, Nicotine 54-31-9, Furosemide 57-27-2, Morphine, biological studies 57-94-3, Tubocurarine 59-05-2, Methotrexate 60-26-4, Hexamethonium 69-27-2 76-41-5, Oxymorphone 76-57-3, Codeine 89-57-6, 5-Aminosalicylic acid 101-31-5, Hyoscyamine 124-90-3, Oxycontin 125-28-0, Dihydrocodeine 156-74-1, Decamethonium 306-40-1, Succinylcholine 378-44-9, Betamethasone 437-38-7, Fentanyl 443-48-1, Metronidazole 446-86-6, Azathioprine 596-51-0, Glycopyrrolate 599-79-1, Sulfasalazine 768-94-5, Amantadine 2609-46-3, Amiloride 7187-66-8, Trimethaphan 7290-03-1,

Erysodine 7440-69-9, Bismuth, biological studies 9005-49-6, Heparin, biological studies 15500-66-0, Pancuronium 23255-54-1 28782-42-5, Difenoxine 50700-72-6, Vecuronium 53179-11-6, Loperamide 55985-32-5, Perpidine 59865-13-3, Cyclosporine 64228-79-1, Atracurium 79517-01-4, Sandostatin 85721-33-1, Ciprofloxacin 90566-53-3, Fluticasone **107538-05-6** **107538-06-7** 122852-69-1, Alosetron hydrochloride 133814-18-3, Doxacurium 133814-19-4, Mivacurium 143558-00-3, Rocuronium 170277-31-3, Remicade **760175-93-7** **760175-94-8** **760175-95-9** **760175-96-0** **760175-97-1** **760175-98-2** **760175-99-3** **760176-00-9** **760176-01-0** **760176-02-1** **760176-03-2** **760176-04-3** **760176-05-4** **760176-06-5** **760176-07-6** **760176-08-7** **760176-09-8** **760176-10-1** **760176-11-2** **760176-12-3** **760176-13-4** **760176-14-5** 760176-15-6 760176-16-7 760176-17-8 760176-18-9 760176-19-0 760176-20-3 **760176-21-4** **760176-22-5** **760176-23-6** **760176-24-7** **760176-25-8** **760176-27-0** **760176-28-1** **760176-29-2** **760176-30-5** **760176-31-6** **760176-32-7** **760176-33-8** **760176-34-9** **760176-35-0** **760176-36-1** **760176-37-2** **760176-38-3** **760176-39-4** **760176-40-7** **760176-41-8** **760176-42-9** **760176-43-0** **760176-44-1** **760176-45-2**
(tetramethylbicycloheptanamine for modulating **gastrointestinal** motility and treating **intestinal** conditions, and combinations with other agents)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:269870 HCAPLUS
DOCUMENT NUMBER: 140:247075
TITLE: Treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil
INVENTOR(S): Kelly, John; **Devane, John**
PATENT ASSIGNEE(S): AGI Therapeutics, Ltd., Ire.
SOURCE: U.S. Pat. Appl. Publ., 20 pp., Cont.-in-part of U.S. Pat. Appl. 2003 92,765.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004063784	A1	20040401	US 2002-294692		20021115
US 6849661	B2	20050201			
US 2003092765	A1	20030515	US 2002-256261		20020927
PRIORITY APPLN. INFO.:			US 2002-256261	B2	20020927
			US 2001-335959P	P	20011115

AB The invention discloses methods for treating, preventing, and/or managing abnormal increases in **gastrointestinal** motility, and **intestinal** conditions that cause the same. Such conditions include, but are not limited to, irritable **bowel** syndrome, infectious diseases of the small and large **intestines**, and symptoms of any of the foregoing. In particular, the invention discloses methods of using enriched (R)-verapamil, as well as compns. and formulations contg. the same.

IC ICM A61K031-275
INCL 514526000
CC 1-9 (Pharmacology)
Section cross-reference(s): 63
ST verapamil isomer **gastrointestinal** motility; irritable **bowel** syndrome **gastrointestinal** motility verapamil isomer; infection **intestine gastrointestinal** motility verapamil isomer
IT Artery
(aorta; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(beads; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(buccal; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(caplets; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems

(capsules; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT **Intestine**
(**colon**; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(controlled-release; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(granules; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT **Intestine**, disease
(infection; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Infection
(**intestinal**; treatment of abnormal increases in gastrointestinal motility with (R)-verapamil)

IT **Intestine**, disease
(irritable **bowel** syndrome; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(matrix system; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(membrane-controlled; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(modified-release; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(nasal; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(oral; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(osmotic pumps; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(parenterals; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(particles; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(rectal; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

IT Drug delivery systems
(sachets; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(solids; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(sublingual; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(suppositories; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(suspensions; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(tablets; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(topical; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
Gastrointestinal agents
Gastrointestinal motility
Vas deferens
(treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Carbohydrates, biological studies
Polyesters, biological studies
Polyoxyalkylenes, biological studies
Polyurethanes, biological studies
(treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Drug delivery systems
(vaginal; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT Polymers, biological studies
(water-sol. and water-insol.; treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT 21829-25-4, Nifedipine 36622-29-4, (S)-Verapamil
(treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT 38321-02-7
(treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)
IT 9002-86-2, Poly (vinyl chloride 9002-88-4, Poly (ethylene
9002-89-5, Polyvinyl alcohol 9003-20-7, Poly (vinyl acetate
9003-21-8, Poly (methyl acrylate 9003-39-8, Polyvinylpyrrolidone

9003-42-3, Poly (ethyl methacrylate) 9003-44-5, Poly (vinyl isobutyl ether 9003-63-8, Poly (butyl methacrylate) 9004-34-6, Cellulose, biological studies 9004-35-7, Cellulose acetate 9004-36-8, Cellulose acetate butyrate 9004-38-0, Cellulose acetate phthalate 9004-39-1, Cellulose acetate propionate 9004-48-2, Cellulose propionate 9004-57-3, Ethylcellulose 9004-64-2, Hydroxypropylcellulose 9004-65-3, Hydroxypropylmethylcellulose 9004-67-5, Methylcellulose 9005-25-8, Starch, biological studies 9011-14-7, Poly (methyl methacrylate) 9011-15-8, Poly (isobutyl methacrylate) 9012-09-3, Cellulose triacetate 25038-59-9, Poly (ethylene terephthalate, biological studies 25087-17-6, Poly (hexyl methacrylate) 25189-01-9, Poly (phenyl methacrylate 25322-68-3, Polyethylene glycol 25719-52-2, Poly (lauryl methacrylate) 25986-77-0, Poly (octadecyl acrylate 26124-32-3, Poly (isopropyl acrylate) 26335-74-0, Poly (isobutyl acrylate 33434-24-1, Eudragit RS 30D 37200-12-7, Poly (isodecyl methacrylate 79484-92-7, Methocel
(treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil)

REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:220142 HCAPLUS
DOCUMENT NUMBER: 140:259107
TITLE: Pharmaceuticals formulations for modified release of statin drugs
INVENTOR(S): Butler, Jackie; **Devane, John**; Stark, Paul
PATENT ASSIGNEE(S): Biovail Laboratories, Inc., Barbados
SOURCE: PCT Int. Appl., 66 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004021972	A2	20040318	WO 2003-IB4361	20030903
WO 2004021972	A3	20040812		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,

LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2497832	AA	20040318	CA 2003-2497832	20030903
US 2004132802	A1	20040708	US 2003-653469	20030903
EP 1545503	A2	20050629	EP 2003-794018	20030903
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
JP 2006503023	T2	20060126	JP 2004-533786	20030903
NO 2005000840	A	20050523	NO 2005-840	20050216
PRIORITY APPLN. INFO.:			US 2002-407270P P	20020903
			WO 2003-IB4361 W	20030903

AB The present invention is directed to compns. and methods of their use in treating, preventing, and/or managing one or more cardiovascular diseases using at least one poorly water-sol. statin, such as, for example, simvastatin and/or lovastatin. One method of the invention involves delaying release of the poorly water-sol. statin for a time sufficient to avoid metab. of the statin at or near the **gastrointestinal** tract wall by the cytochrome P 450 3A metabolic system, and releasing said statin in the ileum, **colon**, or both, with subsequent uptake into the hepatic portal vein and distribution to hepatocytes, wherein HMG-CoA reductase activity may be inhibited with minimal adverse drug interactions. An extended release matrix of simvastatin was prepd. contg Methocel K100LV as the controlled release polymer.

IC ICM A61K

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

L21 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:551361 HCAPLUS
DOCUMENT NUMBER: 139:106482
TITLE: Pravastatin pharmaceutical formulations
INVENTOR(S): Butler, Jackie; **Devane, John**; Stark, Paul
PATENT ASSIGNEE(S): Athpharma Limited, Ire.
SOURCE: PCT Int. Appl., 83 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003057195	A1	20030717	WO 2003-IB336	20030110
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2473106	AA	20030717	CA 2003-2473106	20030110
AU 2003201735	A1	20030724	AU 2003-201735	20030110
US 2003176502	A1	20030918	US 2003-339487	20030110
US 6967218	B2	20051122		
EP 1465605	A1	20041013	EP 2003-700436	20030110
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,				

PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

JP 2005519052	T2	20050630	JP 2003-557553	20030110
CA 2497896	AA	20040318	CA 2003-2497896	20030903
WO 2004021973	A2	20040318	WO 2003-IB4523	20030903
WO 2004021973	A3	20040521		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2004132806	A1	20040708	US 2003-653415	20030903
EP 1551356	A2	20050713	EP 2003-748451	20030903

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK

JP 2006504686	T2	20060209	JP 2004-533791	20030903
NO 2004003333	A	20040913	NO 2004-3333	20040810
NO 2005000933	A	20050418	NO 2005-933	20050221
US 2005277691	A1	20051215	US 2005-205028	20050517
PRIORITY APPLN. INFO.:			US 2002-347775P P	20020111

US 2002-407269P	P	200209 03
US 2003-339487	A1	200301 10
WO 2003-IB336	W	200301 10
WO 2003-IB4523	W	200309 03

AB The present invention relates to formulations comprising a therapeutically effective amt. of pravastatin, or a salt. The present formulations and methods are designed to release little or no pravastatin in the stomach but release a therapeutic amt. of pravastatin in the small **intestine**, thereby limiting systemic exposure of the body to pravastatin and maximizing hepatic-specific absorption of the drug. The formulations and methods are particularly useful for treating and/or preventing conditions that are benefited by decreasing levels of lipids and/or cholesterol in the body. Tablets contained pravastatin sodium 5.56, anhyd. lactose 58.74, Avisel PH200 15.0, Methocel E4M 20.0, colloidal SiO2 0.20, and Mg stearate 0.50%.

IC ICM A61K009-20
ICS A61K009-22; A61K031-22; A61P003-10; A61P009-00

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

IT **Intestine**
(small; pravastatin pharmaceutical formulations)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:376402 HCAPLUS
DOCUMENT NUMBER: 138:348722
TITLE: Treatment of abnormal increases in **gastrointestinal** motility with (R)-verapamil
INVENTOR(S): Kelly, John; **Devane, John**
PATENT ASSIGNEE(S): Ire.
SOURCE: U.S. Pat. Appl. Publ., 19 pp.

CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003092765	A1	20030515	US 2002-256261	20020927
US 2004063784	A1	20040401	US 2002-294692	20021115
US 6849661	B2	20050201		
CA 2499290	AA	20040422	CA 2002-2499290	20021115
WO 2004032919	A1	20040422	WO 2002-IB5140	20021115
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002351118	A1	20040504	AU 2002-351118	20021115
EP 1542673	A1	20050622	EP 2002-785831	20021115
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
JP 2006504724	T2	20060209	JP 2004-542687	20021115
NO 2005002026	A	20050426	NO 2005-2026	20050426

PRIORITY APPLN. INFO.: US 2001-335959P P 200111 15

US 2002-256261 B2 200209 27

WO 2002-IB5140 W 200211 15

AB The present invention is directed to methods of treating, preventing, and/or managing abnormal increases in **gastrointestinal** motility, and **intestinal** conditions that cause the same. Such conditions include, but are not limited to, irritable **bowel** syndrome (IBS), infectious diseases of the small and large **intestines**, and symptoms of any of the foregoing. In particular, the present invention discloses methods of using (R)-verapamil, as well as compns. and formulations contg. the same.

IC ICM A61K031-277
INCL 514520000
CC 1-9 (Pharmacology)
Section cross-reference(s): 63
ST verapamil stereoisomer abnormal **gastrointestinal** motility therapy

IT Artery
(aorta; treatment of abnormal increases in **gastrointestinal** motility with verapamil)

IT Drug delivery systems
(beads; treatment of abnormal increases in **gastrointestinal** motility with verapamil)

IT Drug delivery systems
(buccal; treatment of abnormal increases in **gastrointestinal** motility with verapamil)

IT Drug delivery systems
(caplets; treatment of abnormal increases in **gastrointestinal** motility with verapamil)

IT Drug delivery systems
(capsules; treatment of abnormal increases in **gastrointestinal** motility with verapamil)

IT **Intestine**
(**colon**; treatment of abnormal increases in **gastrointestinal** motility with verapamil)

IT Granulation
(granulating agents; treatment of abnormal increases in **gastrointestinal** motility with verapamil)

IT Drug delivery systems
(granules; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(intravaginal; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT **Intestine**, disease
(irritable **bowel** syndrome; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT **Intestine**
(large, infection; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(nasal; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(oral; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(osmotic pumps; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(parenterals; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Perfumes
(perfuming agents; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(rectal; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(sachets; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT **Intestine**, disease
(small, infection; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(solids; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(sublingual; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(suppositories; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(suspensions; treatment of abnormal increases in **gastrointestinal** motility with verapamil)

IT Drug delivery systems
(tablets, instant-release and modified-release; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Drug delivery systems
(topical; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Antioxidants
Binders
Carriers
Coating materials
Coloring materials
Crosslinking agents
Emulsifying agents
Flavoring materials
Gastrointestinal motility
Gelation agents
Human
Humectants
Lubricants
Muscle contraction
Plasticizers
Preservatives
Release coatings
Setting agents
Stabilizing agents
Surfactants
Sweetening agents
Thickening agents
Vas deferens
Vasodilation
Wetting agents
(treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Carbohydrates, biological studies
Polyesters, biological studies
Polyoxyalkylenes, biological studies
Polyurethanes, biological studies
(treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Polymers, biological studies
(water insol.; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT Polymers, biological studies
(water-sol.; treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT 9002-88-4, Poly(ethylene)
(high and low d.; treatment of abnormal increases in

gastrointestinal motility with verapamil)
IT 7361-61-7, Xylazine 10238-21-8, Glibenclamide 19216-56-9, Prazosin 38304-91-5, Minoxidil
(treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT 21829-25-4, Nifedipine 36622-29-4, (S)-Verapamil 38321-02-7, (R)-VERAPAMIL
(treatment of abnormal increases in **gastrointestinal** motility with verapamil)
IT 9002-86-2, Poly(vinyl chloride) 9003-20-7, Poly(vinylacetate) 9003-21-8, Poly(methyl acrylate) 9003-42-3, Poly(ethyl methacrylate) 9003-44-5, Poly(vinyl isobutyl ether) 9003-63-8, Poly(butylmethacrylate) 9004-34-6, Cellulose, biological studies 9004-35-7, Cellulose acetate 9004-36-8, Cellulose acetate butyrate 9004-38-0, Cellulose acetate phthalate 9004-39-1, Cellulose acetate propionate 9004-48-2, Cellulose propionate 9004-57-3, Ethylcellulose 9004-64-2, Hydroxypropyl cellulose 9004-65-3, Hydroxypropylmethylcellulose 9004-67-5, Methylcellulose 9005-25-8, Starch, biological studies 9011-14-7, Poly(methyl methacrylate) 9011-15-8, Poly(isobutyl methacrylate) 9012-09-3, Cellulose triacetate 25038-59-9, Poly(ethylene terephthalate), biological studies 25087-17-6, Poly(hexylmethacrylate) 25189-01-9, Poly(phenylmethacrylate) 25322-68-3, Polyethylene glycol 25719-52-2, Poly(lauryl methacrylate) 25986-77-0, Poly(octadecylacrylate) 26124-32-3, Poly(isopropyl acrylate) 26335-74-0, Poly(isobutylacrylate) 37200-12-7, Poly(isodecyl methacrylate)
(treatment of abnormal increases in **gastrointestinal** motility with verapamil)

L21 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:334877 HCAPLUS
DOCUMENT NUMBER: 138:343897
TITLE: Gastric-retentive losartan dosage form for hypertension treatment
INVENTOR(S): **Devane, John**; Cumming, K. Iain; Hou, Sui Yuen Eddie; Gusler, Gloria M.
PATENT ASSIGNEE(S): Depomed, Inc., USA
SOURCE: PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 2003035039 A1 20030501 WO 2002-IB5438
200210
25

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CA 2464561 AA 20030501 CA 2002-2464561
200210
25

US 2003158244 A1 20030821 US 2002-280852
200210
25

EP 1438027 A1 20040721 EP 2002-781664
200210
25

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK

JP 2005508358 T2 20050331 JP 2003-537606
200210
25

PRIORITY APPLN. INFO.: US 2001-335247P P
200110
25

WO 2002-IB5438 W
200210
25

AB A method of treatment for hypertension and other disease states comprises the delivery of losartan in a gastric-retentive dosage form. Thus tablets were obtained from losartan potassium 8.3, PEG 25.0, HPMC 25.0, lactose monohydrate 40.7, and Mg stearate 1 mg.

IC ICM A61K009-20
ICS A61K031-415

CC 63-6 (Pharmaceuticals)
Section cross-reference(s): 1

IT **Intestine**
(duodenum; gastric-retentive losartan dosage form for hypertension treatment)

IT **Intestine**

(small; gastric-retentive losartan dosage form for hypertension treatment)

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:518455 HCAPLUS
DOCUMENT NUMBER: 129:239401
TITLE: Assessment of regional differences in **intestinal** fluid movement in the rat using a modified in situ single pass perfusion model
AUTHOR(S): Raoof, Araz A.; Butler, Jackie; **Devane, John G.**
CORPORATE SOURCE: IVIVR Cooperative Working Group, Elan Pharmaceutical Technologies, Athlone, Ire.
SOURCE: Pharmaceutical Research (1998), 15(8), 1314-1316
CODEN: PHREEB; ISSN: 0724-8741
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Transmucosal fluid movement was investigated in 3 different regions of the rat **intestine** (upper small **intestine**, lower small **intestine** and the large **intestine**) using a developed in situ single pass perfusion model automated to perfuse 12 rats simultaneously. 14C-polyethylene glycol 4000 (14C-PEG) was used as an impermeable marker for measuring net water flux with antipyrine as a transcellular passively absorbed marker. Antipyrine is totally absorbed for the gut following oral administration and its **intestinal** absorption, using in situ single pass perfusion in rats, was shown to increase and decrease considerably with fluid absorption and secretion, resp. The variation in the **intestinal** fluid movement obsd. in this study did not affect regional absorption of the passively absorbed compd. antipyrine. The effect of such variation on the regional absorption of carrier mediated compds., nevertheless, remains unclear. The results are discussed in relation to the prediction of drug absorption after oral administration.

CC 1-1 (Pharmacology)
ST **intestine** fluid movement model drug absorption
IT **Intestine**
(assessment of regional differences in **intestinal** fluid movement in rat using a modified in situ single pass perfusion model)
IT Biological transport
(drug; assessment of regional differences in **intestinal** fluid movement in rat using a modified in situ single pass

perfusion model)
IT Biological transport
(uptake; assessment of regional differences in **intestinal** fluid movement in rat using a modified in situ single pass perfusion model)
REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:481723 HCAPLUS
DOCUMENT NUMBER: 129:235493
TITLE: What is the **gastrointestinal** transit of very small particles in humans?
AUTHOR(S): Brown, J.; Ramtoola, Z.; Cumming, I.; Butler, J.; **Devane, J. G.**; Wilding, I. R.
CORPORATE SOURCE: Pharmaceutical Profiles Limited, Nottingham, UK
SOURCE: Proceedings of the International Symposium on Controlled Release of Bioactive Materials (1998), 25th, 126-127
CODEN: PCRMEY; ISSN: 1022-0178
PUBLISHER: Controlled Release Society, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The **gastrointestinal** transit properties of 3 very small formulations were comparable to those reported previously for conventional multiparticulate prepns. which will be advantageous in their use for oral peptide and antigen delivery. In addn. the study offers a new strategy for the neutron activation radiolabeling of small particles using Sm acetylacetonate which significantly extends the versatility fo scintigraphy as applied to the oral route.
CC 63-5 (Pharmaceuticals)
ST oral microparticle **gastrointestinal** transit
IT Digestive tract
Particle size
Scintigraphy
(**gastrointestinal** transit of very small particles in humans)
IT Drug delivery systems
(microparticles, oral; **gastrointestinal** transit of very small particles in humans)
IT 14589-42-5, Samarium acetylacetonate
(**gastrointestinal** transit of very small particles in humans)
REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:234304 HCAPLUS
DOCUMENT NUMBER: 128:261801
TITLE: A novel multiunit controlled-release system
AUTHOR(S): Butler, J.; Cumming, I.; Brown, J.; Wilding, I.; **Devane, J. G.**
CORPORATE SOURCE: Elan Pharmaceutical Technologies, Athlone, Ire.
SOURCE: Pharmaceutical Technology (1998), 22(3), 122,124,126,128,130,132,134,138
CODEN: PTECDN; ISSN: 0147-8087
PUBLISHER: Advanstar Communications, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB PRODAS is a controlled-release system that combines the advantages of tablet-based technol. with presentation as a multiunit system, thus avoiding the potential problem of single-unit systems for complete dose failure or dose dumping. It also allows for customized delivery in terms of combinations of release rates and mechanisms as well as targeted release to different segments of the GI tract. This article describes a study that compared the GI transit of PRODAS with that of a traditional multiparticulate system under fasted and fed conditions using the noninvasive technique of .gamma.-scintigraphy. Transit characteristics of the multiunit formulation were similar to those of the multi-particulate formulation, indicating that the multiunit technol. achieved the same relative independence to GI transit characteristics as multiparticulate systems.
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1
IT **Intestine**
(**colon**; multiunit controlled-release drug delivery system)
IT **Intestine**
(small; multiunit controlled-release drug delivery system)
REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:6895 HCAPLUS
DOCUMENT NUMBER: 128:123394
TITLE: Comparison of methodologies for evaluating regional **intestinal** permeability
AUTHOR(S): Raoof, A.; Moriarty, D.; Brayden, D.; Corrigan, O. I.; Cumming, I.; Butler, J.; **Devane, J.**
CORPORATE SOURCE: Elan Corp. Plc, Athlone, Ire.
SOURCE: Advances in Experimental Medicine and Biology

(1997), 423(In Vitro-In Vivo Correlations), 181-189
CODEN: AEMBAP; ISSN: 0065-2598
PUBLISHER: Plenum Publishing Corp.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors compared the permeability of a no. of drug candidates for inclusion in extended release products. The following 3 model systems were used: the in vitro vascularly perfused rat gut segment, the in situ (single pass) rat gut perfusion system and the Caco-2 cell monolayer system. In the two rat gut systems, three sep. sections of gut were investigated, the uppers mall **intestine**, the lower small **intestine** and the large intestine. In general, the compds. studied in the rat models were found to have a high permeability relative to marker compds. atenolol and antipyrine which are poor and high permeability marker compds., resp. The permeability trends obtained using the in vitro model were similar to those obtained using the in situ model, i.e., both sets of values were found to decrease distally from duodenum to **colon.** Due to differences, no correlation was established between the three different models.

CC 1-1 (Pharmacology)
Section cross-reference(s): 63

ST drug **intestine** permeability methodol

IT Animal cell line
(Caco-2; comparison of methodologies for evaluating regional **intestinal** permeability of drugs)

IT Drug bioavailability
Drug delivery systems
Intestine
Permeability
(comparison of methodologies for evaluating regional **intestinal** permeability of drugs)

IT Biological transport
(drug; comparison of methodologies for evaluating regional **intestinal** permeability of drugs)

REFERENCE COUNT: 25 THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L21 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:496048 HCAPLUS
DOCUMENT NUMBER: 122:298853
TITLE: The effect of food on the **gastrointestinal** transit and systemic absorption of naproxen from a novel sustained-release formulation
AUTHOR(S): Kenyon, C. J.; Hooper, G.; Tierney, D.; Butler,

J.; **Devane, J.**; Wilding, I. R.
CORPORATE SOURCE: Pharmaceutical Profiles Limited, 2 Faraday Building, Highfields Science Park, Nottingham,NG7 2QP, NG7 2QP, UK
SOURCE: Journal of Controlled Release (1995), 34(1), 31-6
CODEN: JCREEC; ISSN: 0168-3659
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The in vivo behavior of a novel sustained-release formulation of naproxen was investigated using gamma scintigraphy in eight healthy male volunteers under fasted and fed conditions. Disintegration of the tablet into discrete sustained-release pellets occurred in the stomach shortly after administration. Feeding resulted in a lag time prior to the onset of gastric emptying but food did not affect transit through the small **intestine**. Post-prandial administration of the sustained-release formulation did not affect the disintegration of the tablet or the bioavailability of the drug.
CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1
IT **Intestine**
(small, food interaction with naproxen bioavailability from sustained-release tablets in humans)

L21 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:476353 HCAPLUS
DOCUMENT NUMBER: 117:76353
TITLE: New developments in sustained-release antihypertensive therapy: formulation and pharmacokinetic considerations
AUTHOR(S): **Devane, John G.**; Mulligan, Seamus; Kavanagh, M.; Davis, Stanley S.; Sparrow, Robert A.; Wilding, Ian R.
CORPORATE SOURCE: Elan Pharm. Res. Corp., Gainesville, GA, USA
SOURCE: American Journal of Cardiology (1992), 69(13), 23E-27E
CODEN: AJCDAG; ISSN: 0002-9149
DOCUMENT TYPE: Journal
LANGUAGE: English
AB In order to achieve a consistently absorbed form of nifedipine over 24 h, a novel formulation approach, INDAS, was used to develop a once-daily, sustained-release (SR) form of nifedipine that could provide effective control of blood pressure at a low total daily dose. The pharmacokinetic characteristics of this new formulation of nifedipine-SR were compared with those of divided doses of conventional nifedipine. The SR formulation achieved a lower peak plasma nifedipine level but with a prolonged plasma profile

characterized by an extended time to peak plasma levels (Tmax), a higher trough plasma level, a longer apparent half-life, and a markedly lower peak-to-trough fluctuation in plasma nifedipine concns. In a sep. study, the **gastrointestinal** transit parameters and phys. characteristics of the SR tablet were evaluated. This study established that the large **intestine** is the major site of residence and absorption for this dosage form. The phys. erosion and disintegration characteristics of the SR formulation are such that a well-maintained absorption of nifedipine is consistently achieved over the 24-h dosing interval.

CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1

IT **Intestine**, metabolism
(large, nifedipine absorption by, from sustained-release tablets in humans, in antihypertensive therapy)

L21 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:412445 HCAPLUS
DOCUMENT NUMBER: 111:12445
TITLE: Pharmacokinetic properties and clinical efficacy of once-daily sustained-release naproxen
AUTHOR(S): Kelly, J. G.; Kinney, C. D.; **Devane, J. G.**; Mulligan, S.; Colgan, B. V.
CORPORATE SOURCE: Inst. Biopharm., Athlone, Ire.
SOURCE: European Journal of Clinical Pharmacology (1989), 36(4), 383-8
CODEN: EJCPAS; ISSN: 0031-6970
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The pharmacokinetics and clin. efficacy of a once-daily sustained-release formulation of naproxen (sodium salt) were compared with those of conventional-release agents. In a single-dose pharmacokinetic study, the rate of absorption of the sustained-release prepn. was less than that of a conventional-release prepn. but the extent of absorption was the same. As is the case with conventional-phase naproxen, food decreased the rate but not the extent of absorption of the sustained-release formulation. On multiple-dose administration for 7 days, the area under the concn.-time curve) and av. concns. of the sustained-release prepn. (1 g daily) were the same as those for conventional-release prepns. of naproxen sodium (250 mg 4 times daily) and naproxen free acid (500 mg daily). The conventional-release sodium salt was absorbed more quickly, with no differences in bioavailability. A double-blind clin. comparison in patients with osteoarthritis showed the sustained-release prepn. (1 g daily) to be equiv. in efficacy to conventional naproxen capsules (500 mg twice daily) but to give a lower incidence of **gastrointestinal** side-effects. The results suggest that

sustained-release naproxen sodium has potential for use as a once-daily treatment for inflammatory disease.

CC 63-5 (Pharmaceuticals)
Section cross-reference(s): 1